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FILE 'HOME' ENTERED AT 12:56:17 ON 10 FEB 2006

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SINCE FILE  
ENTRY

TOTAL  
SESSION

FULL ESTIMATED COST

0.21

0.21

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DICTIONARY FILE UPDATES: 8 FEB 2006 HIGHEST RN 873837-20-8

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\*  
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\*  
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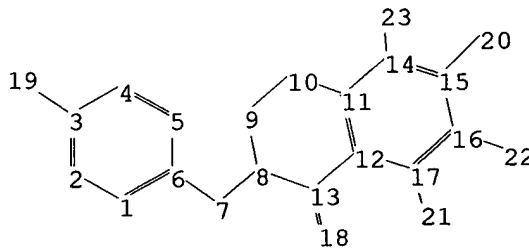
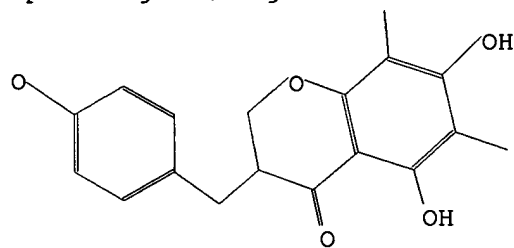
Structure search iteration limits have been increased. See HELP SLIMITS  
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REGISTRY includes numerically searchable data for experimental and  
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experimental property data in the original document. For information  
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=>

Uploading C:\Program Files\Stnexp\Queries\10536675.str



chain nodes :  
7 18 19 20 21 22 23  
ring nodes :  
1 2 3 4 5 6 8 9 10 11 12 13 14 15 16 17  
chain bonds :  
3-19 6-7 7-8 13-18 14-23 15-20 16-22 17-21  
ring bonds :  
1-2 1-6 2-3 3-4 4-5 5-6 8-9 8-13 9-10 10-11 11-12 11-14 12-13 12-17  
14-15 15-16 16-17  
exact/norm bonds :  
3-19 13-18 15-20 17-21  
exact bonds :

6-7 7-8 8-9 8-13 9-10 10-11 12-13 14-23 16-22

normalized bonds :

1-2 1-6 2-3 3-4 4-5 5-6 11-12 11-14 12-17 14-15 15-16 16-17

isolated ring systems :

containing 8 :

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:CLASS 8:Atom 9:Atom 10:Atom

11:Atom 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:Atom 18:CLASS 19:CLASS

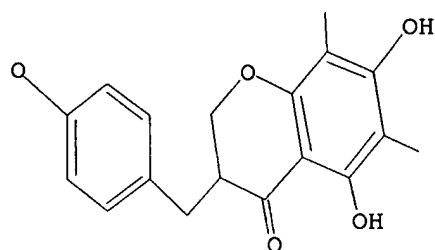
20:CLASS 21:CLASS 22:CLASS 23:CLASS

L1 STRUCTURE UPLOADED

=> d l1

L1 HAS NO ANSWERS

L1 STR



Structure attributes must be viewed using STN Express query preparation.

=> s l1

SAMPLE SEARCH INITIATED 12:56:50 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 17 TO ITERATE

100.0% PROCESSED 17 ITERATIONS

0 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*

BATCH \*\*COMPLETE\*\*

PROJECTED ITERATIONS: 93 TO 587

PROJECTED ANSWERS: 0 TO 0

L2 0 SEA SSS SAM L1

=> s l1 full

FULL SEARCH INITIATED 12:56:54 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 324 TO ITERATE

100.0% PROCESSED 324 ITERATIONS

8 ANSWERS

SEARCH TIME: 00.00.01

L3 8 SEA SSS FUL L1

=> file caplus

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

166.94

167.15

FILE 'CAPLUS' ENTERED AT 12:57:00 ON 10 FEB 2006  
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FILE LAST UPDATED: 9 Feb 2006 (20060209/ED)

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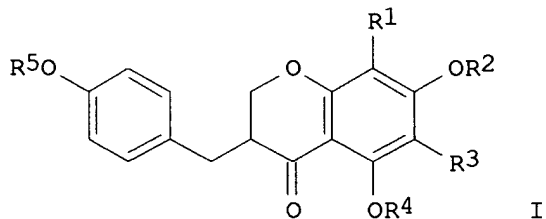
=> s l3 full  
L4 21 L3

=> d ibib abs hitstr tot

L4 ANSWER 1 OF 21 CAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 2005:569362 CAPLUS  
DOCUMENT NUMBER: 143:83212  
TITLE: Skin-whitening compositions containing  
4-n-butylresorcinol and benzopyran derivatives  
INVENTOR(S): Tada, Akihiro; Kanamaru, Akiko  
PATENT ASSIGNEE(S): Kyodo Kumiai Forest Nishikawa, Japan; Pola Chemical  
Industries, Inc.  
SOURCE: Jpn. Kokai Tokkyo Koho, 15 pp.  
CODEN: JKXXAF  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2005170910	A2	20050630	JP 2003-416941	20031215
PRIORITY APPLN. INFO.:			JP 2003-416941	20031215
OTHER SOURCE(S):	MARPAT	143:83212		

GI



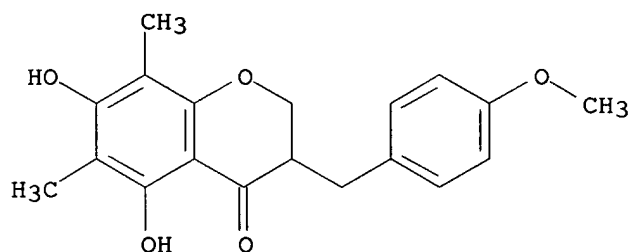
AB The invention relates to a skin composition, especially skin-whitening composition, characterized by containing a compound I (R1 = C1-4 alkyl, alkyloxy, H; R2, R3, R4, R5 = C1-4 alkyl, H) or its salt, and 4-n-butylresorcinol. Thus, methylophiopogonanone B was extracted from *Ophiopogon*, and examined for its inhibitory effect on dendritic growth in cultured human melanocytes. The combination of methylophiopogonanone B and 4-n-butylresorcinol lightened color of cultured melanoma B-16 cells. Also, a skin-whitening cosmetic lotion containing methylophiopogonanone B 0.05, 4-n-butylresorcinol 0.3, and other ingredients to 100 % was formulated.

IT **74805-91-7P**, Methylophiopogonanone B  
RL: COS (Cosmetic use); NPO (Natural product occurrence); PAC (Pharmacological activity); PUR (Purification or recovery); BIOL (Biological study); OCCU (Occurrence); PREP (Preparation); USES (Uses) (skin-whitening compns. containing 4-n-butylresorcinol and benzopyran derivs.)

RN 74805-91-7 CAPLUS

CN 4H-1-Benzopyran-4-one, 2,3-dihydro-5,7-dihydroxy-3-[(4-methoxyphenyl)methyl]-6,8-dimethyl-, (-)- (9CI) (CA INDEX NAME)

Rotation (-).



L4 ANSWER 2 OF 21 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2005:295071 CAPLUS

DOCUMENT NUMBER: 143:179768

TITLE: Determination of homoisoflavonoids in *Ophiopogon japonicus* by RP-HPLC

AUTHOR(S): Ye, Guan; Ye, Min; Guo, Dean; Huang, Chenggang

CORPORATE SOURCE: Shanghai Institute of Materia Medica, Shanghai Institutes for Biological Sciences, Chinese Academy of Sciences, Shanghai, 201203, Peop. Rep. China

SOURCE: Chromatographia (2005), 61(3/4), 121-125

CODEN: CHRGB7; ISSN: 0009-5893

PUBLISHER: Vieweg Verlag/GWV Fachverlage GmbH

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The homoisoflavonoid content of 14 samples of *O. japonicus* collected from different parts of China were investigated. Three principal homoisoflavonoids, methylophiopogonanone A, methylophiopogonanone B, and 6-aldehydoisophiopogonanone A, were analyzed simultaneously by reversed-phase HPLC with a binary mixture of MeCN and 0.3% aqueous HOAc acid as mobile phase. The recovery of the method was 98.5-102.6% and good linearity was obtained for all the homoisoflavonoids over a relatively wide concentration range. The homoisoflavonoid content of *O. japonicus* varied significantly from species to species, and from locality to locality. The quality and identity of *O. japonicus* from the com. herbs can be determined from the homoisoflavonoid content.

IT **74805-91-7**, Methylophiopogonanone B

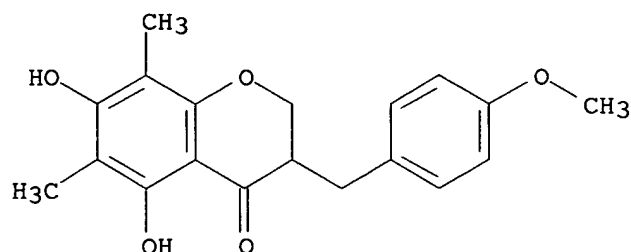
RL: ANT (Analyte); ANST (Analytical study)

(determination of homoisoflavonoids in *Ophiopogon japonicus* by RP-HPLC)

RN 74805-91-7 CAPLUS

CN 4H-1-Benzopyran-4-one, 2,3-dihydro-5,7-dihydroxy-3-[(4-methoxyphenyl)methyl]-6,8-dimethyl-, (-)- (9CI) (CA INDEX NAME)

Rotation (-).



REFERENCE COUNT: 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 3 OF 21 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2005:124970 CAPLUS

DOCUMENT NUMBER: 142:352127

TITLE: Analysis of homoisoflavonoids in *Ophiopogon japonicus* by HPLC-DAD-ESI-MSn

AUTHOR(S): Ye, Min; Guo, Dean; Ye, Guan; Huang, Chenggang

CORPORATE SOURCE: The State Key Laboratory of Natural and Biomimetic Drugs, School of Pharmaceutical Sciences, Peking University, Beijing, Peop. Rep. China

SOURCE: Journal of the American Society for Mass Spectrometry (2005), 16(2), 234-243

CODEN: JAMSEF; ISSN: 1044-0305

PUBLISHER: Elsevier Inc.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The homoisoflavonoids in *Ophiopogon japonicus* (Thunb.) Ker-Gawler were analyzed by high-performance liquid chromatog.-diode array detection-electrospray ion trap tandem mass spectrometry (HPLC-DAD-ESI-MSn). Homoisoflavonoids gave prominent [M - H]- ions by electrospray ionization monitored in the neg. ion mode. They could be classified into two types depending on the fragmentation behavior of their [M - H]- ions in the ion trap mass analyzer. The [M - H]- ions of homoisoflavonoids with a saturated C2-3 bond underwent C3-9 bond cleavage to lose the B-ring, which was followed by the loss of a mol. of CO. The [M - H]- ions of homoisoflavonoids with a C2-3 double bond usually eliminated a CO mol. first, and then underwent the cleavage of C3-9 or C9-1' bonds. For homoisoflavonoids with a C-6 formyl group, however, the neutral loss of CO was the first fragmentation step; the presence of a methoxyl group at C-8 could lead to the cleavage of C-ring. No retro Diels-Alder (RDA) fragmentation characteristic for normal flavonoids was observed. The above fragmentation rules were reported for the first time, and were implemented for the anal. of homoisoflavonoids in *O. japonicus*. The CHCl<sub>3</sub>-MeOH extract was separated on a Zorbax Extend-C18 column, eluting with a acetonitrile-0.3% acetic acid gradient. A total of 18 homoisoflavonoids, including seven new minor constituents, were identified or tentatively characterized based on the UV spectra and tandem mass spectra of the HPLC peaks.

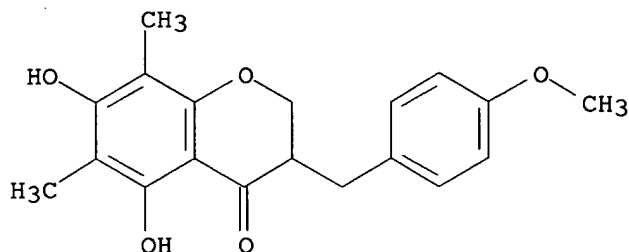
IT 74805-91-7P, Methylophiopogonanone B 88700-30-5P 212201-12-2P

RL: BSU (Biological study, unclassified); PRP (Properties); PUR (Purification or recovery); BIOL (Biological study); PREP (Preparation) (anal. of homoisoflavonoids in *Ophiopogon japonicus*)

RN 74805-91-7 CAPLUS

CN 4H-1-Benzopyran-4-one, 2,3-dihydro-5,7-dihydroxy-3-[(4-methoxyphenyl)methyl]-6,8-dimethyl-, (-)- (9CI) (CA INDEX NAME)

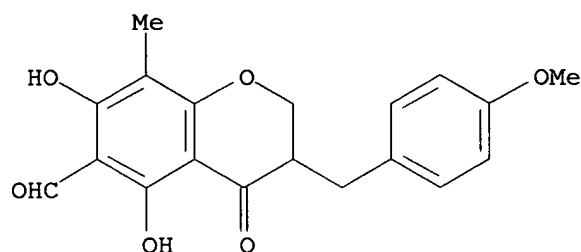
Rotation (-).



RN 88700-30-5 CAPLUS

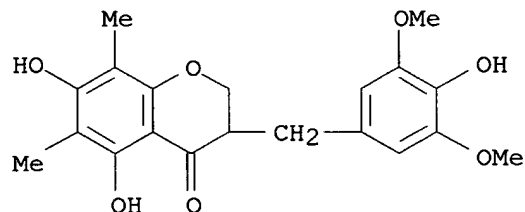
CN 2H-1-Benzopyran-6-carboxaldehyde, 3,4-dihydro-5,7-dihydroxy-3-[(4-methoxyphenyl)methyl]-8-methyl-4-oxo-, (-)- (9CI) (CA INDEX NAME)

Rotation (-).



RN 212201-12-2 CAPLUS

CN 4H-1-Benzopyran-4-one, 2,3-dihydro-5,7-dihydroxy-3-[(4-hydroxy-3,5-dimethoxyphenyl)methyl]-6,8-dimethyl- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 4 OF 21 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2004:595355 CAPLUS

DOCUMENT NUMBER: 142:245775

TITLE: The chemical constituents of Vietnamese medicinal plant *Ophiopogon japonicus*

AUTHOR(S): Nguyen, Thi Hoang Anh

CORPORATE SOURCE: Institute of Chemistry, National Center for Natural Sciences and Technology, Na Noi, Vietnam

SOURCE: Tap Chi Phan Tich Hoa, Ly Va Sinh Hoc (2004), 9(1), 59-64

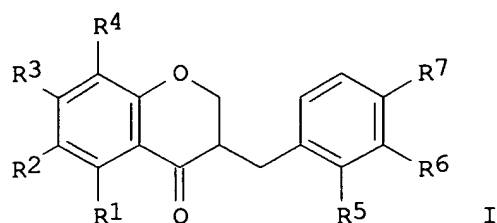
CODEN: TCPTAH

PUBLISHER: Vietnam Analytical Sciences Society

DOCUMENT TYPE: Journal

LANGUAGE: English

GI



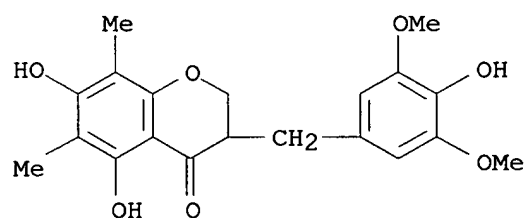
AB The chemical constituents isolated from the Vietnamese medicinal plant *Ophiopogon Japonicus* are reported. Chromatog. separation of the Et acetate extract yielded 13 homoisoflavonoids and a monoterpene, borneol. From the butanol extract six steroidal glycosides and monoterpene glycoside were isolated. Addnl., Me, Et, Bu  $\alpha$ -fructofuranosides, Bu  $\beta$ -D-fructofuranoside were also obtained. Five of the homoisoflavonoids were identified to be new compds. and were elucidated as I (R1 = R3 = OH, R2 = R5 = OMe, R4 = H), I (R1 = R2 = R5 = OMe, R3 = OH, R4 = H), I (R1 = R5 = OH, R2 = Me, R3 = H, R4 = OMe), 2,5,7-trihydroxy-6,8-dimethyl-3-(3',4'-methylenedioxybenzyl)chroman-4-one and 2,5,7-trihydroxy-6,8-dimethyl-3-(4'-methoxybenzyl)chroman-4-one.

IT 212201-12-2 588706-68-7 588706-70-1

RL: NPO (Natural product occurrence); THU (Therapeutic use); BIOL (Biological study); OCCU (Occurrence); USES (Uses)  
(chemical constituents of Vietnamese medicinal plant *Ophiopogon japonicus*)

RN 212201-12-2 CAPLUS

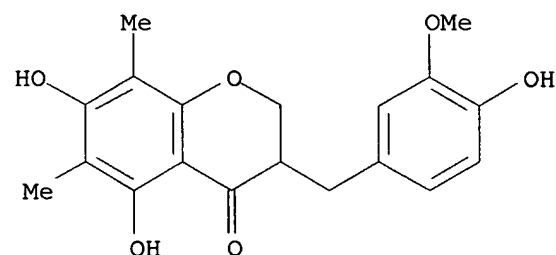
CN 4H-1-Benzopyran-4-one, 2,3-dihydro-5,7-dihydroxy-3-[(4-hydroxy-3,5-dimethoxyphenyl)methyl]-6,8-dimethyl- (9CI) (CA INDEX NAME)



RN 588706-68-7 CAPLUS

CN 4H-1-Benzopyran-4-one, 2,3-dihydro-5,7-dihydroxy-3-[(4-hydroxy-3-methoxyphenyl)methyl]-6,8-dimethyl- (9CI) (CA INDEX NAME)

Currently available stereo shown.

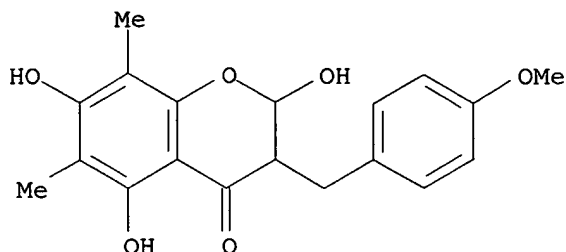


RN 588706-70-1 CAPLUS

CN 4H-1-Benzopyran-4-one, 2,3-dihydro-2,5,7-trihydroxy-3-[(4-



Rotation (-).  
Currently available stereo shown.



L4 ANSWER 5 OF 21 CAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 2004:490710 CAPLUS  
DOCUMENT NUMBER: 141:42570  
TITLE: Dendrite elongation inhibitor for melanocyte and skin  
preparation for external use containing the same  
INVENTOR(S): Tada, Akihiro; Kanamaru, Akiko; Saeki, Yuko  
PATENT ASSIGNEE(S): Pola Chemical Industries Inc., Japan  
SOURCE: PCT Int. Appl., 21 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004050053	A1	20040617	WO 2003-JP15266	20031128
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
EP 1570837	A1	20050907	EP 2003-775959	20031128
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK			
US 2005288361	A1	20051229	US 2005-536675	20050527
PRIORITY APPLN. INFO.:			JP 2002-349376	A 20021202
			WO 2003-JP15266	W 20031128

AB Disclosed are a dendrite elongation inhibitor for melanocytes which comprises benzopyranone derivs. and/or a salt thereof; and a skin preparation for external use which contains the compound or salt as an active ingredient. Methylophiopogonanone B (I) was isolated from root of *Ophiopogon japonicus*. A skin lotion for inhibiting melanin formation contained I 0.005, squalane 10, sorbitan sesquistearate 2, butylparaben 0.1, 1,3-butanediol 5, xanthan gum 0.1, alkyl methacrylate-acrylic acid copolymer 0.4, methylparaben 0.1, KOH 0.2, and distilled water balance to 100 %.

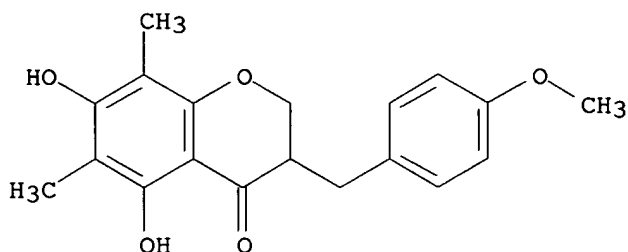
IT 74805-91-7P, Methylophiopogonanone B

RL: COS (Cosmetic use); PAC (Pharmacological activity); PUR (Purification or recovery); BIOL (Biological study); PREP (Preparation); USES (Uses) (melanocyte dendrite elongation inhibitors containing benzopyranone derivs.)

RN 74805-91-7 CAPLUS

CN 4H-1-Benzopyran-4-one, 2,3-dihydro-5,7-dihydroxy-3-[(4-methoxyphenyl)methyl]-6,8-dimethyl-, (-)- (9CI) (CA INDEX NAME)

Rotation (-).



REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 6 OF 21 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2004:387612 CAPLUS

DOCUMENT NUMBER: 140:420652

TITLE: Discrimination of maidong derived from Ophiopogon and Liriope species by rbcL sequences, and their chemical components and tuber anatomy

AUTHOR(S): Mao, Shiba; Yamaji, Hiroki; Kondo, Kenji; Ichiki, Hiroyuki; Sakakibara, Iwao; Terabayashi, Susumu; Amagaya, Sakae; Aburada, Masaki; Miyamoto, Ken-ichi

CORPORATE SOURCE: Pharmacognosy & Medicinal Resources Laboratory, Research Division, Tsumura and Co., Ibaraki, 300-1192, Japan

SOURCE: Natural Medicines (Tokyo, Japan) (2004), 58(1), 15-21  
CODEN: NMEDEO; ISSN: 1340-3443

PUBLISHER: Japanese Society of Pharmacognosy

DOCUMENT TYPE: Journal

LANGUAGE: English

AB To discriminate the two kinds of Maidong derived from Ophiopogon or Liriope more reliably using genetic information, we sequenced partial rbcL genes of six species of Ophiopogon, three species and one variety of Liriope, and the Maidong from the markets. In this study, six genotypes, five in Ophiopogon and one in Liriope, were recognized. Then, it was possible to discriminate clearly by the rbcL genotype between the Maidong derived from Ophiopogon and Liriope species. We determined the contents of methylophiopogonanone A and B by HPLC that were reported as specific constituents to Maidong of Ophiopogon species. Both methylophiopogonanone A and B were contained only in the Maidong identified as Ophiopogon by the rbcL genotype. On the discrimination of the two kinds of Maidong, methylophiopogonanone A and B are also effective. Addnl., Maidong of Ophiopogon and Liriope, could be identified anatomically with 76% and 93% probability resp. by checking whether or not oil drops in exodermis and velamen occur in the tuber.

IT 74805-91-7, Methylophiopogonanone B

RL: NPO (Natural product occurrence); BIOL (Biological study); OCCU (Occurrence)

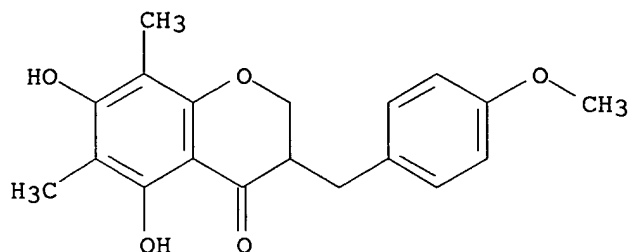
(methylophiopogonanone A and B content in Ophiopogon and Liriope species)

RN 74805-91-7 CAPLUS

CN 4H-1-Benzopyran-4-one, 2,3-dihydro-5,7-dihydroxy-3-[(4-

methoxyphenyl)methyl]-6,8-dimethyl-, (-)- (9CI) (CA INDEX NAME)

Rotation (-).



REFERENCE COUNT: 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 7 OF 21 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2003:906044 CAPLUS

DOCUMENT NUMBER: 139:358799

TITLE: Antitussive agents and pharmaceutical compositions containing methylophiopogonanone

INVENTOR(S): Kamei, Akizo; Ichiki, Hiroyuki

PATENT ASSIGNEE(S): Tsumura and Co., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 4 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2003327529	A2	20031119	JP 2002-135539	20020510
PRIORITY APPLN. INFO.:			JP 2002-135539	20020510

AB The agents, which show little central side effects, contain methylophiopogonanone A (I) and/or B. I (extracted from ophiopogon) was administered to guinea pigs at 30 mg/ka to show 49.7% inhibition of capsaicin-induced cough.

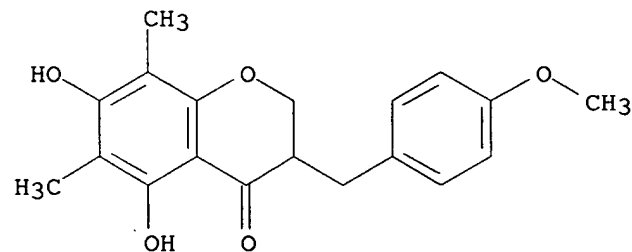
IT **74805-91-7P**, Methylophiopogonanone B  
RL: PAC (Pharmacological activity); PUR (Purification or recovery); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(antitussive agents containing methylophiopogonanone A or B)

RN 74805-91-7 CAPLUS

CN 4H-1-Benzopyran-4-one, 2,3-dihydro-5,7-dihydroxy-3-[(4-methoxyphenyl)methyl]-6,8-dimethyl-, (-)- (9CI) (CA INDEX NAME)

Rotation (-).



L4 ANSWER 8 OF 21 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2003:871439 CAPLUS

DOCUMENT NUMBER: 140:232499

TITLE: Some homoisoflavonoidal compounds from *Ophiopogon japonicus* Ker-Gawler

AUTHOR(S): Nguyen, Thi Hoang Anh; Tran, Van Sung; Wessjohann, L.

CORPORATE SOURCE: Institute of Chemistry, NCST, Vietnam

SOURCE: Tap Chi Hoa Hoc (2003), 41(3), 117-121

CODEN: TCHHDC; ISSN: 0378-2336

PUBLISHER: Toa Soan Tap Chi Hoa Hoc

DOCUMENT TYPE: Journal

LANGUAGE: English

AB *Ophiopogon japonicus* is a medicinal plant which is widely used in traditional Chinese medicine. In folk medicine of Vietnam it has been used as an expectorant, antitussive, and tonic. Six homoisoflavonoids were isolated by EtOAc extraction of the roots of *O. japonicus*. Their structures were elucidated by mass and NMR spectroscopy as ophiopogonanone A, methylophiopogonanone B, methylophiopogonanone A, 6-aldehydoisophiopogonanone A, methylophiopogonone A and 5,7,2'-trihydroxy-6,8-dimethyl-3-(3'-4'-dimethylenedioxybenzyl)chromone.

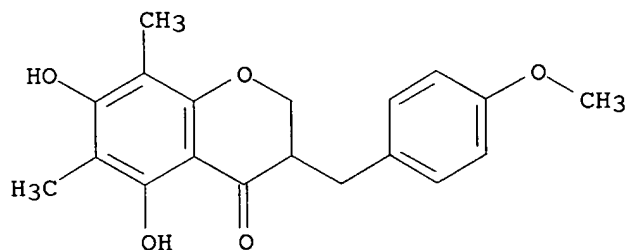
IT 74805-91-7, Methylophiopogonanone B

RL: BSU (Biological study, unclassified); BIOL (Biological study) (from *Ophiopogon japonicus*)

RN 74805-91-7 CAPLUS

CN 4H-1-Benzopyran-4-one, 2,3-dihydro-5,7-dihydroxy-3-[(4-methoxyphenyl)methyl]-6,8-dimethyl-, (-)- (9CI) (CA INDEX NAME)

Rotation (-).



REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 9 OF 21 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2003:835805 CAPLUS

DOCUMENT NUMBER: 140:192416

TITLE: Specific inhibition of hypoxia-inducible factor (HIF)-1 $\alpha$  activation and of vascular endothelial growth factor (VEGF) production by flavonoids

AUTHOR(S): Hasebe, Yuki; Egawa, Kiyoshi; Yamazaki, Yoko; Kunitomo, Setsuko; Hirai, Yasuaki; Ida, Yoshiteru; Nose, Kiyoshi

CORPORATE SOURCE: Department of Microbiology, Showa University School of Pharmaceutical Sciences, Tokyo, 142-8555, Japan

SOURCE: Biological & Pharmaceutical Bulletin (2003), 26(10), 1379-1383

CODEN: BPBLEO; ISSN: 0918-6158

PUBLISHER: Pharmaceutical Society of Japan

DOCUMENT TYPE: Journal

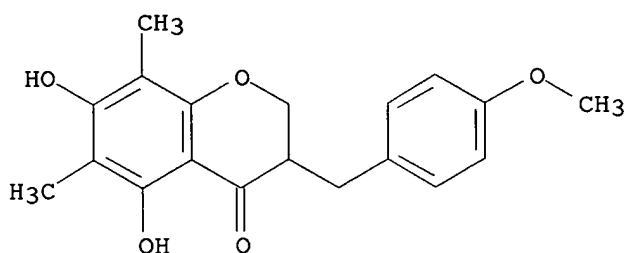
LANGUAGE: English

AB Screening using a reporter under the control of the hypoxia-response element (HRE) identified several flavonoids and homoisoflavonoids that inhibit the activation of HRE under hypoxic conditions. Among various

compds., isorhamnetin, luteolin, quercetin, and Me ophiopogonanone B (MOB) were effective at 3 to 9 µg/mL in inhibiting the reporter activity. The expression of vascular endothelial growth factor (VEGF) mRNA during hypoxia was also inhibited by MOB in HepG2 cells, but the EDs were 10 to 20 µg/mL. MOB caused destabilization of hypoxia-inducible factor (HIF)-1α, as revealed by Western blotting, that was dependent on proteasome activity and the tumor suppressor, p53. The tubular formation and migration of human umbilical vein endothelial cells was also inhibited by MOB. MOB is expected to act as an inhibitor of angiogenesis.

IT **74805-91-7P**, Methyl ophiopogonanone B  
 RL: NPO (Natural product occurrence); PAC (Pharmacological activity); PUR (Purification or recovery); THU (Therapeutic use); BIOL (Biological study); OCCU (Occurrence); PREP (Preparation); USES (Uses)  
 (inhibition of HIF-1α VEGF production by flavonoids)  
 RN 74805-91-7 CAPLUS  
 CN 4H-1-Benzopyran-4-one, 2,3-dihydro-5,7-dihydroxy-3-[(4-methoxyphenyl)methyl]-6,8-dimethyl-, (-)- (9CI) (CA INDEX NAME)

Rotation (-).



REFERENCE COUNT: 35 THERE ARE 35 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 10 OF 21 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 2003:124830 CAPLUS  
 DOCUMENT NUMBER: 139:210790  
 TITLE: Homoisoflavonoids from *Ophiopogon japonicus* Ker-Gawler  
 AUTHOR(S): Hoang Anh, Nguyen Thi; Van Sung, Tran; Porzel, Andrea; Franke, Katrin; Wessjohann, Ludger A.  
 CORPORATE SOURCE: Institute of Chemistry, National Centre for Natural Sciences and Technology, Hanoi, Vietnam  
 SOURCE: Phytochemistry (Elsevier) (2003), 62(7), 1153-1158  
 CODEN: PYTCAS; ISSN: 0031-9422  
 PUBLISHER: Elsevier Science Ltd.  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English

AB From the Et acetate extract of the tuberous roots of *Ophiopogon japonicus* (Liliaceae) eight known and five new homoisoflavonoidal compds. were isolated. The new compds. are 5,7-dihydroxy-8-methoxy-6-methyl-3-(2'-hydroxy-4'-methoxybenzyl)chroman-4-one (1), 7-hydroxy-5,8-dimethoxy-6-methyl-3-(2'-hydroxy-4'-methoxybenzyl)chroman-4-one (2), 5,7-dihydroxy-6,8-dimethyl-3-(4'-hydroxy-3'-methoxybenzyl)chroman-4-one (3), 2,5,7-trihydroxy-6,8-dimethyl-3-(3',4'-methylenedioxybenzyl)chroman-4-one (4) and 2,5,7-trihydroxy-6,8-dimethyl-3-(4'-methoxybenzyl)chroman-4-one (5). Their structures have been elucidated by mass and NMR spectroscopy. Compds. 4 and 5 are the first isolated homoisoflavonoids with a hemiacetal function at position 2.

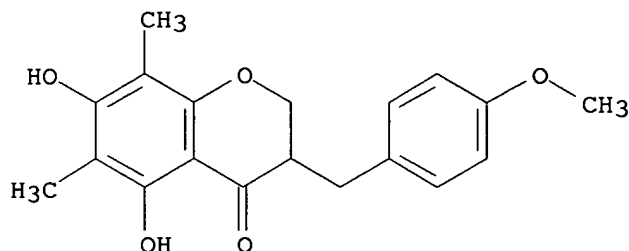
IT **74805-91-7**, Methyl ophiopogonanone B **212201-12-2**,  
 5,7-Dihydroxy-6,8-dimethyl-3-(4'-hydroxy-3',5'-dimethoxybenzyl)chroman-4-one  
 RL: NPO (Natural product occurrence); BIOL (Biological study); OCCU (Occurrence)

(homoisoflavonoids from *Ophiopogon japonicus*)

RN 74805-91-7 CAPLUS

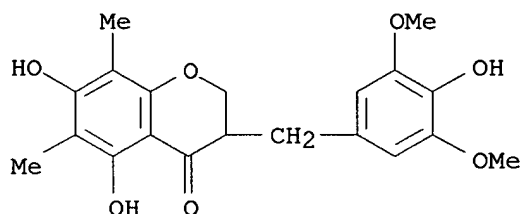
CN 4H-1-Benzopyran-4-one, 2,3-dihydro-5,7-dihydroxy-3-[(4-methoxyphenyl)methyl]-6,8-dimethyl-, (-)- (9CI) (CA INDEX NAME)

Rotation (-).



RN 212201-12-2 CAPLUS

CN 4H-1-Benzopyran-4-one, 2,3-dihydro-5,7-dihydroxy-3-[(4-hydroxy-3,5-dimethoxyphenyl)methyl]-6,8-dimethyl- (9CI) (CA INDEX NAME)



IT **588706-68-7**, 5,7-Dihydroxy-6,8-dimethyl-3-(4'-hydroxy-3'-methoxybenzyl)chroman-4-one **588706-70-1**, 2,5,7-Trihydroxy-6,8-dimethyl-3-(4'-methoxybenzyl)chroman-4-one

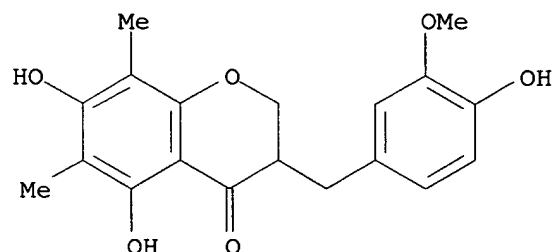
RL: NPO (Natural product occurrence); PRP (Properties); BIOL (Biological study); OCCU (Occurrence)

(homoisoflavonoids from *Ophiopogon japonicus*)

RN 588706-68-7 CAPLUS

CN 4H-1-Benzopyran-4-one, 2,3-dihydro-5,7-dihydroxy-3-[(4-hydroxy-3-methoxyphenyl)methyl]-6,8-dimethyl- (9CI) (CA INDEX NAME)

Currently available stereo shown.

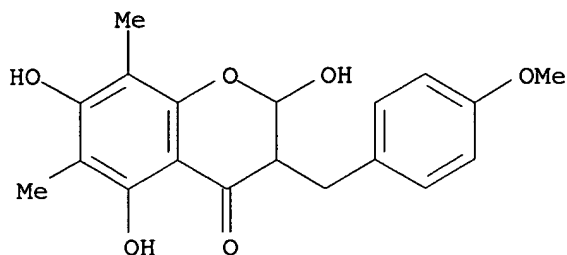


RN 588706-70-1 CAPLUS

CN 4H-1-Benzopyran-4-one, 2,3-dihydro-2,5,7-trihydroxy-3-[(4-methoxyphenyl)methyl]-6,8-dimethyl-, (-)- (9CI) (CA INDEX NAME)

Rotation (-).

Currently available stereo shown.



REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 11 OF 21 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2002:132098 CAPLUS

DOCUMENT NUMBER: 136:330403

TITLE: Bioactive homoisoflavones from Vietnamese coriander or pak pai (*Polygonatum odoratum*)

AUTHOR(S): Vastano, Bret C.; Rafi, M. Mohamed; DiPaola, Robert S.; Zhu, Nanqun; Ho, Chi-Tang; Rella, Anthony T.; Ghai, Geetha; Rosen, Robert T.

CORPORATE SOURCE: Center for Advanced Food Technology, and Department of Food Science, Cook College, Rutgers, The State University of New Jersey, New Brunswick, NJ, 08901-8520, USA

SOURCE: ACS Symposium Series (2002), 803 (Quality Management of Nutraceuticals), 269-280

CODEN: ACSMC8; ISSN: 0097-6156

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The roots of *Polygonatum odoratum* were screened for compds. which induce apoptosis in breast cancer cell lines. The powdered roots were extracted with methanol and Et acetate. The Et acetate fraction was then subjected to bioassay directed fractionation using silica gel column chromatog. Bcl-2 protein, a regulator of apoptosis, was assessed by immunoblot. The active fraction was eluted with 30:1 CHCl<sub>3</sub>/CH<sub>3</sub>OH and was rechromatographed on a second silica gel column. Elution with 20:80 hexanes/chloroform yielded the active fraction which was purified using semipreparative HPLC. 2 Compds. were identified. These include 2,3-dihydro-3-[(15-hydroxyphenyl)methyl]-5,7-dihydroxy-6-methyl-8-methoxy-4H-1-benzopyran-4-one and 2,3-dihydro-3-[(15-hydroxyphenyl)-methyl]-5,7-dihydroxy-6,8-dimethyl-4H-1-benzopyran-4-one.

IT **189264-18-4P**

RL: PRP (Properties); PUR (Purification or recovery); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

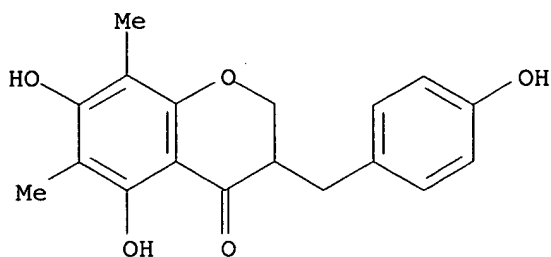
(homoisoflavones from Vietnamese coriander, isolation, structure, and effect on apoptosis in breast cancer)

RN 189264-18-4 CAPLUS

CN 4H-1-Benzopyran-4-one, 2,3-dihydro-5,7-dihydroxy-3-[(4-hydroxyphenyl)methyl]-6,8-dimethyl-, (-)- (9CI) (CA INDEX NAME)

Rotation (-).

Currently available stereo shown.



REFERENCE COUNT: 28 THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 12 OF 21 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 2001:581715 CAPLUS  
 DOCUMENT NUMBER: 135:147415  
 TITLE: Polygonum odoratum extracts for prevention and treatment of cancer  
 INVENTOR(S): Rosen, Robert T.; Ho, Chi-Tang; Dipaola, Robert S.; Rafi, Mohammed; Ghai, Geetha; Vastano, Bret C.  
 PATENT ASSIGNEE(S): Rutgers, the State University, USA  
 SOURCE: PCT Int. Appl., 15 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001056580	A1	20010809	WO 2001-US3064	20010131
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				

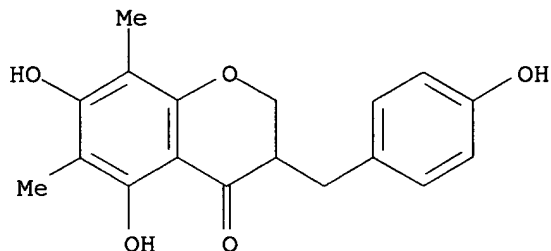
PRIORITY APPLN. INFO.: US 2000-178950P P 20000201

AB Methods for prevention and treatment of cancer comprise exts. of P. odoratum or compds. isolated from the exts. Thus, 2,3-dihydro-3-[(4-hydroxyphenyl)methyl]-5,7-dihydroxy-6-methyl-8-methoxy-4H-1-benzopyran-4-one (I) was isolated and purified from P. odoratum exts. The ability of I to induce bcl-2 phosphorylation was examined by Western blot anal. The presence of bcl-2 and phosphorylated bcl-2 proteins was detected by using a monoclonal bcl-2 primary antibody and a secondary goat anti-mouse HRP-conjugated antibody. Control breast cancer MCF-7 cells treated with vehicle (alc.) had no detectable phosphorylated bcl-2. I induces bcl-2 phosphorylation in cancer cells, results consistent with the effects of a known chemotherapeutic agent, paclitaxel, in cancer cells.

IT **189264-18-4**  
 RL: BAC (Biological activity or effector, except adverse); BOC (Biological occurrence); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); OCCU (Occurrence); USES (Uses)  
 (Polygonum odoratum exts. for prevention and treatment of cancer)  
 RN 189264-18-4 CAPLUS  
 CN 4H-1-Benzopyran-4-one, 2,3-dihydro-5,7-dihydroxy-3-[(4-hydroxyphenyl)methyl]-6,8-dimethyl-, (-)- (9CI) (CA INDEX NAME)



Rotation (-).  
Currently available stereo shown.



REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 13 OF 21 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1998:422060 CAPLUS

DOCUMENT NUMBER: 129:200478

TITLE: Cytotoxic components of Ophiopogonis Tuber

AUTHOR(S): Takatsuki, Satoshi; Narui, Takao; Maeyama, Akiko; Asano, Ryuya; Abuki, Hideo; Hiraga, Yukio; Okuyama, Toru

CORPORATE SOURCE: National Inst. Health Sciences, Tokyo, 158, Japan

SOURCE: Natural Medicines (Tokyo) (1998), 52(2), 145-150

CODEN: NMEDEO; ISSN: 1340-3443

PUBLISHER: Japanese Society of Pharmacognosy

DOCUMENT TYPE: Journal

LANGUAGE: Japanese

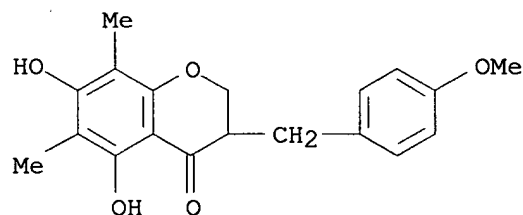
AB Nine compds. were isolated from an AcOEt extract of Ophiopogonis Tuber and some of them in previous reports showed a strong cytotoxic activity on HeLa-S3 cell. Two of them were new compds. and their structures were established as 7,8-dihydroxy-6-methyl-3-(2,4-dimethoxybenzyl)chroman-4-one and 5,7-dihydroxy-6,8-dimethyl-3-(hydroxy-3,5-dimethoxybenzyl)chroman-4-one by their <sup>1</sup>H-NMR, <sup>13</sup>C-NMR and HR-MS spectra. The original plant of the crude drug used in this experiment was identified as Ophiopogon chekiangensis by microscopic examination

IT 212201-07-5 212201-09-7 212201-12-2

RL: BOC (Biological occurrence); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study); OCCU (Occurrence)  
(cytotoxic components of Ophiopogonis Tuber)

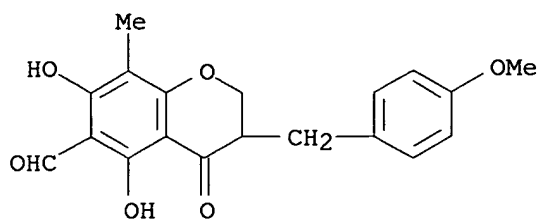
RN 212201-07-5 CAPLUS

CN 4H-1-Benzopyran-4-one, 2,3-dihydro-5,7-dihydroxy-3-[(4-methoxyphenyl)methyl]-6,8-dimethyl- (9CI) (CA INDEX NAME)



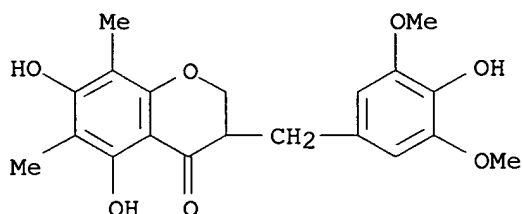
RN 212201-09-7 CAPLUS

CN 2H-1-Benzopyran-6-carboxaldehyde, 3,4-dihydro-5,7-dihydroxy-3-[(4-methoxyphenyl)methyl]-8-methyl-4-oxo- (9CI) (CA INDEX NAME)



RN 212201-12-2 CAPLUS

CN 4H-1-Benzopyran-4-one, 2,3-dihydro-5,7-dihydroxy-3-[(4-hydroxy-3,5-dimethoxyphenyl)methyl]-6,8-dimethyl- (9CI) (CA INDEX NAME)



L4 ANSWER 14 OF 21 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1997:188100 CAPLUS

DOCUMENT NUMBER: 126:314768

TITLE: Benzoquinones, a homoisoflavanone and other constituents from *Polygonatum alte-lobatum*

AUTHOR(S): Huang, Pao-Lin; Gan, Kim-Hong; Wu, Ru-Rong; Lin, Chun-Nan

CORPORATE SOURCE: Sch. Pharmacy, Kaohsiung Med. Coll., Kaohsiung, 807, Taiwan

SOURCE: Phytochemistry (1997), 44(7), 1369-1373

CODEN: PYTCAS; ISSN: 0031-9422

PUBLISHER: Elsevier

DOCUMENT TYPE: Journal

LANGUAGE: English

AB From the rhizomes of *Polygonatum alte-lobatum*, two new homologous series of 1,4-benzoquinones, polygonaquinones A and B, a novel homoisoflavanone, a new gentrogenin glycoside and 13 known compds. were isolated and characterized. The structures of the new compds. were determined as two homologous series of three 2,5-dihydroxy-3-methyl-6-alkyl-1,4-benzoquinones and three 2-hydroxy-3-methyl-6-alkyl-1,4-benzoquinones, with chain lengths C21 to C23, and 4',5,7-trihydroxy-6,8-dimethylhomoisoflavanone and gentrogenin 3-O- $\beta$ -D-glucopyranosyl(1 $\rightarrow$ 2)-{ $\beta$ -D-xylopyranosyl(1 $\rightarrow$ 3)}- $\beta$ -D-glucopyranosyl(1 $\rightarrow$ 4)- $\beta$ -D-galactopyranoside.

IT 189264-18-4P

RL: BOC (Biological occurrence); BSU (Biological study, unclassified); PRP (Properties); PUR (Purification or recovery); BIOL (Biological study); OCCU (Occurrence); PREP (Preparation)

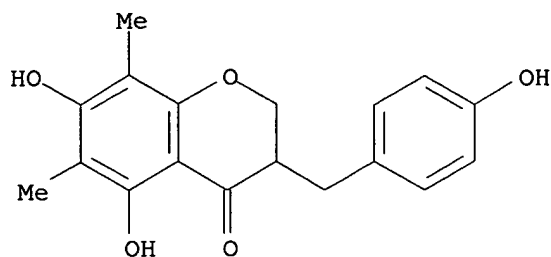
(benzoquinones, a homoisoflavanone and other constituents from *Polygonatum alte-lobatum*)

RN 189264-18-4 CAPLUS

CN 4H-1-Benzopyran-4-one, 2,3-dihydro-5,7-dihydroxy-3-[(4-hydroxyphenyl)methyl]-6,8-dimethyl-, (-)- (9CI) (CA INDEX NAME)

Rotation (-).

Currently available stereo shown.



L4 ANSWER 15 OF 21 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1991:68919 CAPLUS

DOCUMENT NUMBER: 114:68919

TITLE: Comparative studies on the constituents of  
ophiopogonis tuber and its congeners. Part V.  
Studies on the constituents of the subterranean part  
of *Ophiopogon chekiangensis* K. Kimura et H. Migo  
AUTHOR(S): Watanabe, Yoshiaki; Hirai, Yasuaki; Sanada, Shuichi;  
Ida, Yoshiteru; Tanaka, Toshihiro; Shoji, Junzo  
CORPORATE SOURCE: Sch. Pharm. Sci., Showa Univ., Tokyo, 142, Japan  
SOURCE: Shoyakugaku Zasshi (1990), 44(2), 117-21  
CODEN: SHZAA; ISSN: 0037-4377

DOCUMENT TYPE: Journal

LANGUAGE: English

GI For diagram(s), see printed CA Issue.

AB Chemical constituents of the subterranean parts of *O. chekiangensis* (Liliaceae) were examined from a pharmacognostic aspect, and were compared with those of *O. japonicus* and *O. ohwii* previously studied. Isolated were 13 known compds., 6 steroidal glycosides, 7 homoisoflavonoids and a new steroidal glycoside, the structure of which was characterized as I on the basis of its chemical and spectroscopic data. The results suggest that chemotaxonically *O. chekiangensis* is identical with neither *O. japonicus* nor *O. ohwii*, though it is more closely related to the latter species than the former.

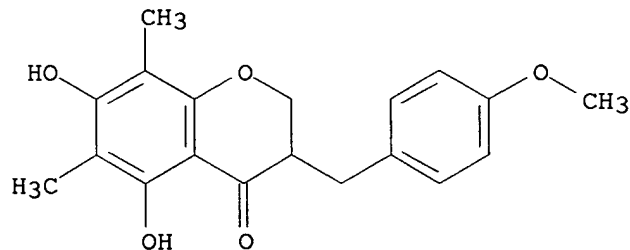
IT 74805-91-7, Methylophiopogonanone B

RL: BIOL (Biological study)  
(of *Ophiopogon chekiangensis* tubers and congeners)

RN 74805-91-7 CAPLUS

CN 4H-1-Benzopyran-4-one, 2,3-dihydro-5,7-dihydroxy-3-[(4-methoxyphenyl)methyl]-6,8-dimethyl-, (-)- (9CI) (CA INDEX NAME)

Rotation (-).



L4 ANSWER 16 OF 21 CAPLUS COPYRIGHT 2006 ACS on STN

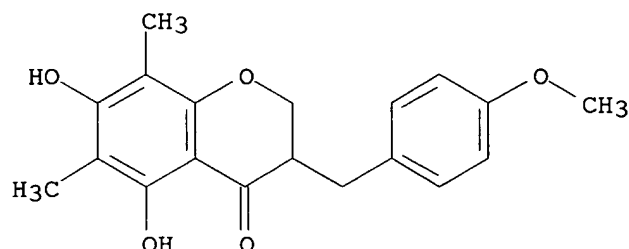
ACCESSION NUMBER: 1989:141636 CAPLUS

DOCUMENT NUMBER: 110:141636

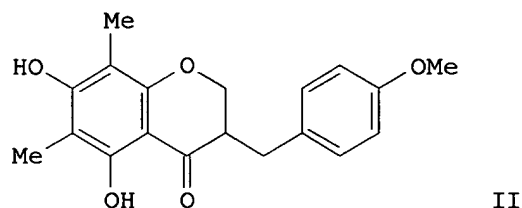
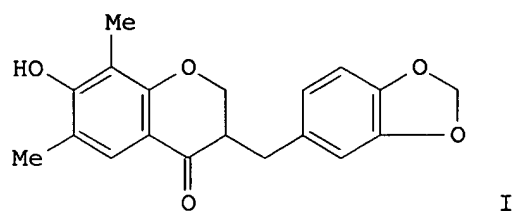
TITLE: Chemical studies on the components of *Shenmaisai* II.  
HPLC assay for homoisoflavonoids of *Ophiopogon* in

Shenmaisan  
 AUTHOR(S): Zhu, Yongxin; Yan, Kedong; Tu, Guoshi  
 CORPORATE SOURCE: Natl. Inst. Control Pharm. Biol. Prod., Beijing, Peop.  
 Rep. China  
 SOURCE: Yaowu Fenxi Zazhi (1988), 8(6), 343-4  
 CODEN: YFZADL; ISSN: 0254-1793  
 DOCUMENT TYPE: Journal  
 LANGUAGE: Chinese  
 AB The homoisoflavonoids methylophiopogonanone A and B were extracted with Et2O  
 from decoction of Shenmaisan containing Ophiopogon japonicus roots and  
 determined  
 by HPLC, using MeOH-H2O-MeCN (64:38:26) as the mobile phase and detection  
 at 297 nm; the recovery was 102.0 and 101.2%, resp., and the coefficient of  
 variation was <1.30%.  
 IT **74805-91-7**, Methylophiopogonanone B  
 RL: ANT (Analyte); ANST (Analytical study)  
 (determination of, in Shenmaisan (Ophiopogon japonicus), by HPLC)  
 RN 74805-91-7 CAPLUS  
 CN 4H-1-Benzopyran-4-one, 2,3-dihydro-5,7-dihydroxy-3-[(4-  
 methoxyphenyl)methyl]-6,8-dimethyl-, (-)- (9CI) (CA INDEX NAME)

Rotation (-).



L4 ANSWER 17 OF 21 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 1988:173631 CAPLUS  
 DOCUMENT NUMBER: 108:173631  
 TITLE: Separation and determination of homoisoflavonoids in  
 Ophiopogon japonicus by reversed-phase  
 high-performance liquid chromatography  
 AUTHOR(S): Zhu, Yongxin; Yan, Kedong; Tu, Guoshi  
 CORPORATE SOURCE: Natl. Inst. Control Pharm. Biol. Prod., Minist.  
 Health, Beijing, Peop. Rep. China  
 SOURCE: Journal of Chromatography (1988), 437(1), 265-7  
 CODEN: JOCRAM; ISSN: 0021-9673  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 GI



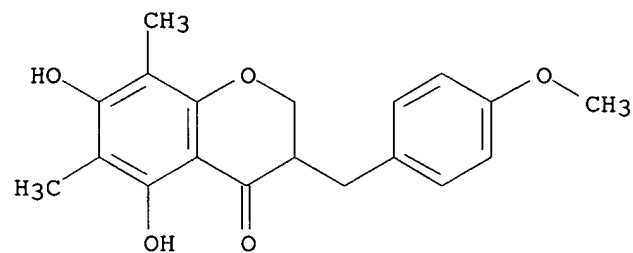
AB Two main homoisoflavonoids, methylophiopogonanone A (I) and methylophiopogonanone B (II), of the Chinese medicinal plant *O. japonica* Ker-Gawl were determined by reversed-phase HPLC with a YWG-C18-packed column (250 + 4 mm), MeOH-H<sub>2</sub>O-MeCN (64:38:26) mobile phase at 1 mL/min, UV monitoring at 297 nm. MeOH exts. of powdered plant material were used. Recoveries for I and II were 96.44-98.02 and 92.78-104.5%, resp., and the corresponding curves were linear with samples of 0.05-0.5 and 0.05-0.48 µg.

IT **74805-91-7**, Methylophiopogonanone B  
 RL: ANT (Analyte); ANST (Analytical study)  
 (determination of, of Ophiopogonanone japonicus by reversed-phase HPLC)

RN 74805-91-7 CAPLUS

CN 4H-1-Benzopyran-4-one, 2,3-dihydro-5,7-dihydroxy-3-[(4-methoxyphenyl)methyl]-6,8-dimethyl-, (-)- (9CI) (CA INDEX NAME)

Rotation (-).



L4 ANSWER 18 OF 21 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1988:52811 CAPLUS

DOCUMENT NUMBER: 108:52811

TITLE: Isolation and identification of homoisoflavanones from Maidong (*Ophiopogon japonicus* (Thunb) Ker-Gawl)

AUTHOR(S): Zhu, Yongxin; Yan, Kedong; Tu, Guoshi

CORPORATE SOURCE: Natl. Inst. Control Pharm. Biol. Prod., Beijing, Peop. Rep. China

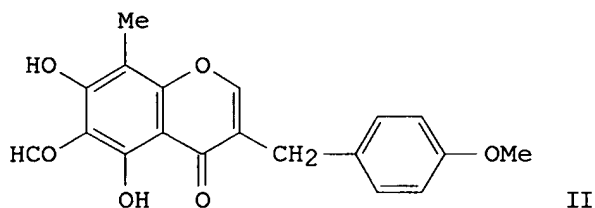
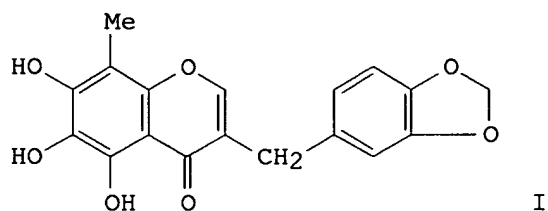
SOURCE: Yaoxue Xuebao (1987), 22(9), 679-84

CODEN: YHHPAL; ISSN: 0513-4870

DOCUMENT TYPE: Journal

LANGUAGE: Chinese

GI



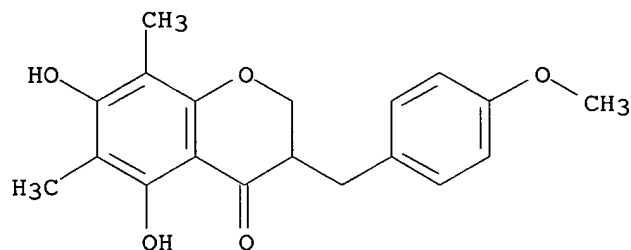
AB Five homoisoflavanoids isolated from tubers of *O. japonicus* were identified by phys. and chemical properties and spectral data. Three are homoisoflavanones: 6-aldehydoisophiopogonanone A, methylophiopogonanone A, and methylophiopogonanone B. Two are new homoisoflavones, named 6-aldehydoisophiopogonanone A (I) and 6-aldehydoisophiopogonanone B (II), resp.

IT **74805-91-7**, Methylophiopogonanone B  
 RL: BIOL (Biological study)  
 (from *Ophiopogon japonicus*)

RN 74805-91-7 CAPLUS

CN 4H-1-Benzopyran-4-one, 2,3-dihydro-5,7-dihydroxy-3-[(4-methoxyphenyl)methyl]-6,8-dimethyl-, (-)- (9CI) (CA INDEX NAME)

Rotation (-).



L4 ANSWER 19 OF 21 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1986:183269 CAPLUS

DOCUMENT NUMBER: 104:183269

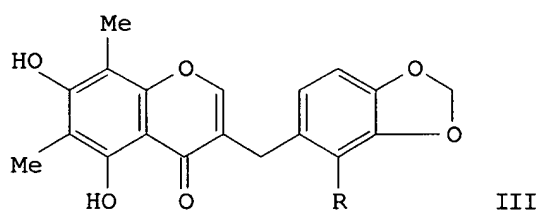
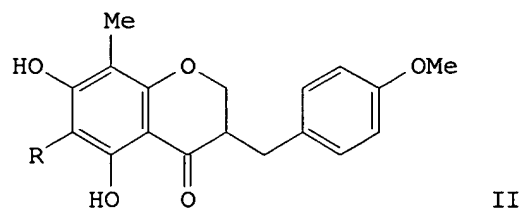
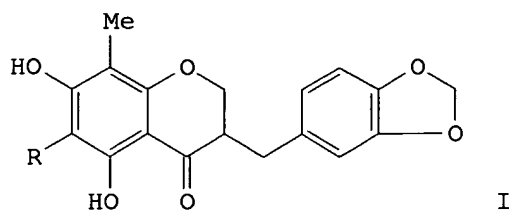
TITLE: Comparative studies on the constituents of  
 ophiopogonis tuber and its congeners. IV. Studies on  
 the homoisoflavanoids of the subterranean part of  
*Ophiopogon ohwii* Okuyama and *O. jaburan* (Kunth) Lodd  
 Watanabe, Yoshiaki; Sanada, Shuichi; Ida, Yoshiteru;  
 Shoji, Junzo

AUTHOR(S):  
 CORPORATE SOURCE: Sch. Pharm. Sci., Showa Univ., Tokyo, 142, Japan  
 SOURCE: Chemical & Pharmaceutical Bulletin (1985), 33(12),  
 5358-63

CODEN: CPBTAL; ISSN: 0009-2363

DOCUMENT TYPE: Journal  
 LANGUAGE: English

GI



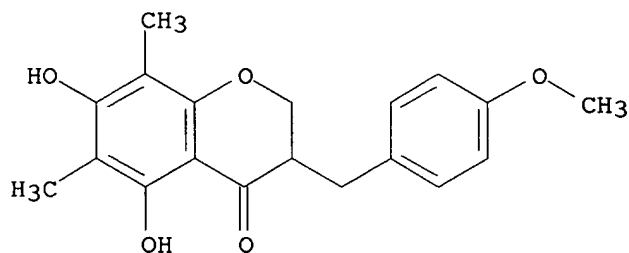
AB Six homoisoflavanoid compds., tentatively named NE-I (I R = CHO), NE-II (II, R = CHO), NE-III (I, R = Me), NE-IV (II, R = Me), NE-V (III, R = H) and NE-VI (III, R = OH), were isolated from the ether-soluble fraction of the subterranean part of *O. ohwii* (Lilaceae) and 4 homoisoflavanoid compds., tentatively named JE-I, JE-III and JE-IV, were isolated from that of *O. jaburan* and their structures were determined. The structures of JE-I, JE-II, JE-III and JE-IV were elucidated to be 3,5-dihydroxy-7-methoxy-6-methyl-3-(4-hydroxybenzyl)chroman-4-one, 5-hydroxy-7-methoxy-6-methyl-3-(3,4-dihydroxybenzyl)chromone, 5,7-dihydroxy-6-methyl-3-(4-hydroxybenzyl)chromone, and 5,7-dihydroxy-3-(4-hydroxybenzyl)chromone, resp.

IT **74805-91-7 88700-30-5**  
 RL: BIOL (Biological study)  
 (from *Ophiopogon ohwii*, structure of)

RN 74805-91-7 CAPLUS

CN 4H-1-Benzopyran-4-one, 2,3-dihydro-5,7-dihydroxy-3-[(4-methoxyphenyl)methyl]-6,8-dimethyl-, (-)- (9CI) (CA INDEX NAME)

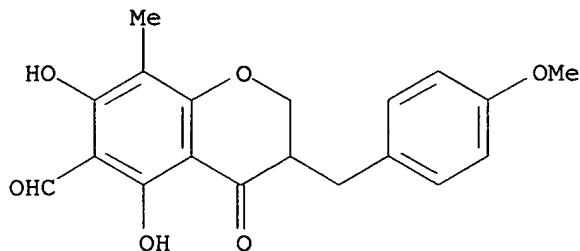
Rotation (-).



RN 88700-30-5 CAPLUS

CN 2H-1-Benzopyran-6-carboxaldehyde, 3,4-dihydro-5,7-dihydroxy-3-[(4-methoxyphenyl)methyl]-8-methyl-4-oxo-, (-)- (9CI) (CA INDEX NAME)

Rotation (-).



L4 ANSWER 20 OF 21 CAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 1984:73836 CAPLUS  
DOCUMENT NUMBER: 100:73836  
TITLE: Studies on the components of Ophiopogon roots (China).  
I  
AUTHOR(S): Kaneda, Norito; Nakanishi, Hiroyuki; Kuraishi,  
Tadayuki; Katori, Tatuhiko  
CORPORATE SOURCE: Cent. Res. Lab., SS Pharm. Co. Ltd., Narita, 286,  
Japan  
SOURCE: Yakugaku Zasshi (1983), 103(11), 1133-9  
CODEN: YKKZAJ; ISSN: 0031-6903  
DOCUMENT TYPE: Journal  
LANGUAGE: Japanese  
GI

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

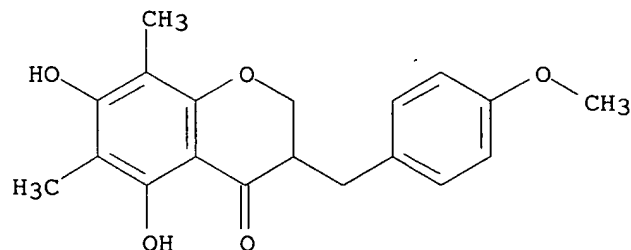
AB The components of Ophiopogon roots (China) was investigated. In addition to the reported homoisoflavanoids in *O. japonicus* (methylophiopogonanone A [74805-92-8], B [74805-91-7] and ophiopogonanone A [75239-63-3]), 8 new compds., 5 homoisoflavanoids (I [88700-29-2], II [88700-30-5], III [88700-31-6], IV [88700-32-7], and V [88700-33-8]), an amide (VI) [88700-34-9] and 2 borneol glycosides VII [88763-93-3] and VIII) [88700-35-0] were isolated.

IT 74805-91-7 88700-30-5  
RL: BOC (Biological occurrence); BSU (Biological study, unclassified);  
BIOL (Biological study); OCCU (Occurrence)  
(of *Ophiopogon japonicus* roots)

RN 74805-91-7 CAPLUS

CN 4H-1-Benzopyran-4-one, 2,3-dihydro-5,7-dihydroxy-3-[(4-methoxyphenyl)methyl]-6,8-dimethyl-, (-)- (9CI) (CA INDEX NAME)

Rotation (-).

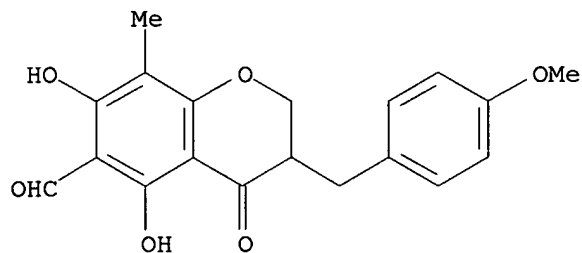




RN 88700-30-5 CAPLUS

CN 2H-1-Benzopyran-6-carboxaldehyde, 3,4-dihydro-5,7-dihydroxy-3-[(4-methoxyphenyl)methyl]-8-methyl-4-oxo-, (-)- (9CI) (CA INDEX NAME)

Rotation (-).



L4 ANSWER 21 OF 21 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1980:528749 CAPLUS

DOCUMENT NUMBER: 93:128749

TITLE: Studies on the constituents of *Ophiopogonis tuber*. V. Isolation of a novel class of homoisoflavonoids and determination of their structures. 1

AUTHOR(S): Tada, Akihiro; Kasai, Ryoji; Saitoh, Tamotsu; Shoji, Junzo

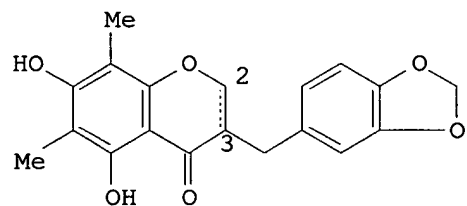
CORPORATE SOURCE: Sch. Pharm. Sci., Showa Univ., Tokyo, 142, Japan  
SOURCE: Chemical & Pharmaceutical Bulletin (1980), 28(5), 1477-84

CODEN: CPBTAL; ISSN: 0009-2363

DOCUMENT TYPE: Journal

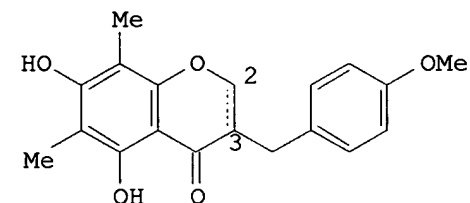
LANGUAGE: English

GI



I, 2,3-satd.

III, 2,3-unsatd.



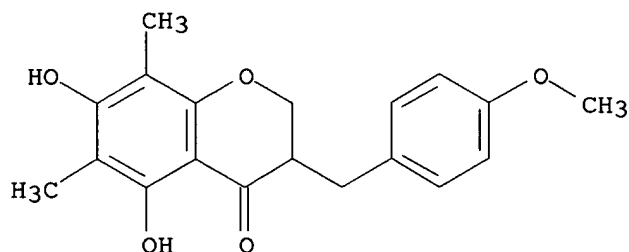
II, 2,3-satd.

IV, 2,3-unsatd.

AB The new homoisoflavonoidal compds. methylophiopogonanone A (I), methylophiopogonanone B (II), methylophiopogonone A (III), and methylophiopogonone B (IV) were isolated from ophiopogonis tubers (tubers of *Ophiopogon japonicus* var *genuinus*, Liliaceae) and their structures were shown to be 5,7-dihydroxy-6,8-dimethyl-3-(3,4-methylenedioxybenzyl)-chroman-4-one, 5,7-dihydroxy-6,8-dimethyl-3-(4-methoxybenzyl)-chroman-4-one, 5,7-dihydroxy-6,8-dimethyl-3-(3,4-methylenedioxybenzyl)-chromone, and 5,7-dihydroxy-6,8-dimethyl-3-(4-methoxybenzyl)-chromone, resp. Methylophiopogonones A and B are members of a new class of naturally

occurring homoisoflavanoidals having a double bond at C2-3.  
 IT 74805-91-7  
 RL: BIOL (Biological study)  
 (Ophiopogon isoflavanoid, structure of)  
 RN 74805-91-7 CAPLUS  
 CN 4H-1-Benzopyran-4-one, 2,3-dihydro-5,7-dihydroxy-3-[(4-methoxyphenyl)methyl]-6,8-dimethyl-, (-) - (9CI) (CA INDEX NAME)

Rotation (-).



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